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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,963	03/12/2004	Mo-Han Fong	NRT-0121US (16634RRUSQ2U)	9041
21906	7590	04/15/2008	EXAMINER	
TROP PRUNER & HU, PC				
1616 S. VOSS ROAD, SUITE 750				
HOUSTON, TX 77057-2631				
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			04/15/2008	PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/799,963

Filing Date: March 12, 2004

Appellant(s): FONG ET AL.

Dan C. Hu

A statement identifying by name the real party in interest is contained in the brief.

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 01/09/2008 appealing from the Office action mailed 07/26/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 7068683 B1	Lundby et al.	6-2006
US 7155236 B2	Chen et al.	12-2006
US 6252898 B1	Eto et al.	6-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-12, and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundby et al. (US Pat 7068683), hereafter "Lundby," in view of Chen et al. (US Pat 7155236), hereafter "Chen".

Consider claims 1 and 20, Lundby discloses a wireless communications network (see Lundby: Abstract; col. 3 lines 8-10; fig. 1). Lundby discloses communicating data with plural mobile stations over a wireless link (see Lundby: Abstract; col. 6 lines 19-25; figs. 1, 5). Lundby discloses sending a broadcast message to the plural mobile stations (see Lundby: Abstract; col. 8 lines 25-38).

Lundby discloses the broadcast message containing an indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions **back to the base station (see Lundby: col. 9 lines 55-67 and col. 10 lines 1-14; fig. 11 steps 122-134)**, but does not particularly refer to transmission to **back to the base station** as reverse link. Chen discloses mobile station transmission on the reverse link **(see Chen: col. 2 lines 25-32 and 67; col. 3 lines 1-6)**.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Lundby and have it refer to reverse link for mobile-to-base channel communication, as taught by Chen, thereby utilizing an appropriate conventional technical term to distinguish transmission wireless channels between base and mobile stations.

Consider claims 2, 3, 4, and 7, Lundby, as modified by Chen, teaches claims 1, 13, and 14 above respectively; and Chen further discloses grant message on grant message channel on a CDMA system (see Chen: col. 10 lines 62-67; col. 12 lines 3-6; col. 20 lines 22-28; col. 27 lines 38-52).

Consider claims 5 and 6, Lundby, as modified by Chen, teaches claim 4 above; and Chen further discloses MAC ID settings (see Chen: col. 28 Lines 3-4).

Consider claims 8 and 25, Lundby, as modified by Chen, teaches claims 7 and 20 above respectively; and Chen further discloses a shared resources system and mobile ID assignment (see Chen: Abstract; col. 1 Lines 45-50).

Consider claims 9 and 12, Lundby, as modified by Chen, teaches claims 1 and 8 above; and Lundby further discloses changing data rates for transmissions back to the

base station (see Lundby: col. 9 lines 55-67 and col. 10 lines 1-14; fig. 11 steps 122-134).

Consider claims 10, 11, 21, and 22, Lundby, as modified by Chen, teaches claims 1, 20, and 21 above respectively; and Chen further discloses autonomous transmitting mode (see Chen: Title; col. 1 lines 17-20; col. 13 lines 45-51 and 66-67; figs. 5, 7, 8).

Consider 23, and 24, Lundby, as modified by Eto, teaches claim 20 above; and Lundby further discloses indicating data rate to mobile stations (see Lundby: col. 9 lines 55-67 and col. 10 lines 1-14; fig. 11 steps 122-134).

4. Claims 13, 14, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundby et al. (US Pat 7068683), hereafter "Lundby," in view of Eto et al. (US 6252898 B1), hereafter "Eto."

Consider claim 13, as amended, Lundby discloses a system in a wireless communications network (**see Lundby: Abstract; col. 3 lines 8-10; fig. 1**), communicating data with plural mobile stations over a wireless link (**see Lundby: Abstract; col. 6 lines 19-25; figs. 1, 5**). Lundby discloses sending a broadcast message containing an identifier (**see Lundby: col. 8 lines 31-38**). Lundby discloses the identifier set to a first value to uniquely identify one of the plural mobile stations (**see col. 4 lines 53-58**).

Lundby discloses broadcasting an identifier *and control signaling* to a plurality of mobile stations (**see col. 8 lines 3-11, lines 25-38**) and indicating to the plural mobile

stations that the mobile stations are to change data rates for transmissions over a reverse wireless link (**reverse link read on mobile station transmitting to the base station -see col. 9 lines 41-45, col. 10 lines 9-12, fig. 11 step 34**), but does not particularly refer to changing data rate in reference to a predetermined value. Eto teaches changing data rate in reference to a predetermined value (**see abstract, col. 2 lines 59-67, col. 3 lines 16-21, where Eto discusses a changing data rate according to a predetermined value**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Lundby and have it include changing data rate in reference to a predetermined value, as taught by Eto, thereby providing means for improving data transmission and power efficiency in a spread spectrum wireless communication system.

Consider claim 14, Lundby, as modified by Eto, teaches claim 13 above; Lundby further implicitly discloses layer 2 messaging (data transmission reads on layer 2 messaging –see Lundby: Title; Abstract; col. 1 lines 25-29).

Consider claim 17, Lundby, as modified by Eto, teaches claims 1 and 8 above; and Lundby further discloses changing data rates for transmissions back to the base station (see Lundby: col. 9 lines 55-67 and col. 10 lines 1-14; fig. 11 steps 122-134).

Consider claims 18 and 19, Lundby, as modified by Eto, teaches claim 13 above; and Lundby further discloses indicating data rate to mobile stations (see Lundby: col. 9 lines 55-67 and col. 10 lines 1-14; fig. 11 steps 122-134).

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundby et al. (US Pat 7068683), hereafter "Lundby," in view of Eto et al. (US 6252898 B1), hereafter "Eto," as applied to claims 13 and 14 respectively, further in view of Chen et al. (US Pat 7155236), hereafter "Chen".

Consider claim 15, Lundby, as modified by Eto, teaches claim 14 above, but does not particularly refer to grant message on grant message channel on a CDMA system. Chen teaches grant message on grant message channel on a CDMA system (see Chen: col. 10 lines 62-67; col. 12 lines 3-6; col. 20 lines 22-28; col. 27 lines 38-52). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Lundby and Eto and have it grant message on grant message channel on a CDMA system, as taught by Chen, thereby providing means for coordinating data transmission in a cellular network, as taught by Chen (see col. 2 lines 21-40).

Consider claim 16, as amended, Lundby, as modified by Eto, teaches claim 13 above; Eto further teaches setting parameters according to a predetermined value (see abstract, col. 2 lines 59-67, col. 3 lines 16-21, where Eto discusses a changing data rate according to a predetermined value), but the reference combination does not particularly refer to grant message on grant message channel on a CDMA system. Chen teaches grant message on grant message channel on a CDMA system (see Chen: col. 10 lines 62-67; col. 12 lines 3-6; col. 20 lines 22-28; col. 27 lines 38-52). It would have been obvious to a person of ordinary skill in the art at the time the invention

was made to modify the invention of Lundby and Eto and have it include grant message on grant message channel on a CDMA system, as taught by Chen, thereby providing means for coordinating data transmission in a cellular network, as taught by Chen (see col. 2 lines 21-40).

(10) Response to Argument

Regarding the appellant's argument about claim 1 pointing that no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Lundby and Chen to achieve the claimed invention, the examiner asserts that the combination is appropriate because both Lundby and Chen are in the same field of invention, i.e., a wireless communication network involving mobile stations and base stations, and particularly, a CDMA system (see Lundby: abstract, col. 6 lines 19-24, figs. 1 and 5; Chen: abstract, col. 1 lines 24-44, figs. 1, 2, and 4).

Regarding the appellant's argument that the examiner's assertion that the base station of Lundby sends broadcast message to indicate to multiple mobile stations that data rates of the mobile stations are to be changed is incorrect and that Lundby does not disclose the sending of a broadcast message to plural mobile stations, where the broadcast contains an indication to the plural mobile stations that the mobile stations are to change data rates for transmissions over a reverse wireless link, the examiner maintains that Lundby's teachings do support said feature, and Lundby additionally discusses broadcasting, that is, *transmitting to more than one receiver* (see Lundby: the abstract, col. 2 lines 14-19, col. 8 lines 25-29, where Lundby discusses each mobile station receiving a common packet of data and the base station transmitting a data rate

indication. If a base station is capable of transmitting a packet of data common to a group or plurality of mobile stations as well as transmitting a data rate change or power control indication to an individual mobile station, and that each receiver selectively decodes only packets where the message identifies the receiver as a target recipient (wherein the data rate change may be included). Lundby also discusses wherein an exemplary embodiment of the invention is a CDMA system, as stated above, in which, the base station commands the mobile station to adjust its reverse link transmission power, which is proportional, in a CDMA cellular network, to changing the data transmission rate (Lundby: col. 3 lines 64-67, col. 4 lines 35-36, col. 6 lines 19-25). Lundby also discusses wherein the base station schedules each mobile station to transmit on the reverse link taking into account power level (Lundby: col. 5 lines 57-67), and also discusses wherein the base station determines the data rate for the mobile station (Lundby: col. 9 lines 43-45).

Regarding appellant's argument that nowhere in the cited passages of Chen, or anywhere in Chen, is there any hint of sending a broadcast message to a plural mobile station, the examiner maintains that Chen was not cited for said limitation, which is taught by Lundby as shown above

Regarding appellant's argument that the hypothetical combination of Lundby and Chen would have led to a process where a base station and each mobile station would have to individually negotiate data rates to be used for a reverse link is contrary to the use of a broadcast message containing an indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmission over a

reverse wireless link, the examiner reiterates that Lundby alone and not Chen, was cited to show that a broadcast is sent to a plurality of mobile stations by the base station with an indication in the packet as well as the rate change functions of a CDMA system, as shown above, and that the fact that Lundby, additionally, teaches a particular feature, does not necessarily mean that said reference fails to meet a limitation as stated in the claim and as interpreted by a person of ordinary skill in the art.

Again, regarding the appellant's argument that there is no hint anywhere within Lundby nor in Chen of modifying this procedure to provide for a broadcast message that is sent to plural mobile stations to indicate to the plural mobile stations that they are to change data rates for transmission over a reverse wireless link, the examiner reiterates and maintains that Lundby alone, not Chen, was cited to show this limitation, as shown above.

Regarding the appellant's argument related to claims 20-25 that there is nothing to indicate that this broadcast message would be provided to cause a mobile station to change its data rate of transmission over a reverse link, the examiner has already shown where Lundby teaches said limitation (see response to argument with respect to claim 1 above).

Regarding the appellant's argument that no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Lundby and Chen, the examiner asserts that the reason why a person of ordinary skill in the art would combine the teachings of the reference exists, as shown above.

Regarding the appellant's argument related to claim 13 that there is no hint given in Lundby of sending a broadcast message and that the obviousness rejection is defective, the examiner maintains that the rejection is appropriate because, as shown, above, Lundby and Chen, both, belong to the same field of invention (see first paragraph of the response above).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning with respect to the rejection of claim 13, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this regard, the combination is proper because both are in the same field of endeavor, and also clearly teaches data rate change indication and response to said indication from a transmitting station to another (see Eto: col. 3 lines 16-21).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the reasons stated above, it is believed that the rejections for the present application should be sustained.

Art Unit: 2617

Respectfully submitted,

/Amancio González/

AG/ag

April 1, 2008

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